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| 10/634,871      | 08/06/2003  | Noam Kedem           | 246/217             | 7627             |

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DR. MARK FRIEDMAN LTD.  
c/o Bill Polkinghorn  
Discovery Dispatch  
9003 Florin Way  
Upper Marlboro, MD 20772

EXAMINER

FIGUEROA, FELIX O

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2833

DATE MAILED: 05/04/2006

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/634,871  
Filing Date: August 06, 2003  
Appellant(s): KEDEM, NOAM

**MAILED**

MAY 04 2006

**GROUP 2800**

\_\_\_\_\_  
Mark M. Friedman  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 9, 2006 appealing from the Office action mailed January 11, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US 6,231,399 B1

Meng

05-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 13, 3, 4, 8-10, 16 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meng (US 6,231,399).

Meng discloses system board (col.2, line 57) comprising a connector (10) that includes: a first port (14) situated on the system board; a second port (16) facing inward to an interior of the system board; and a peripheral device (not shown) operationally connected to the inward-facing port. Meng does not disclose the first port being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that "changes may be made in detail, especially in the matters of shape, size and arrangement of parts within the principles of the invention" (col. 3 lines 3-5). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first port situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first port.

Regarding claim 3, Meng discloses the ports being substantially functionally identical.

Regarding claim 4, Meng discloses substantially the claimed invention except for the specific connector type. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to elect a specific connector type (for

example a USB connector) base on environmental requirements/preferences, in order to provide a space efficient assembly.

Regarding claims 8 and 9, Meng discloses a host device / computer (col.1, line 10) comprising the system board.

Regarding claim 10, Meng discloses substantially the claimed invention except for the specific host device. Meng teaches that the arrangement provides an efficient space usage. It would have been obvious to one having ordinary skill in the art at the time of the invention to use the arrangement of Meng in different host devices, such as routers and mobile devices, in order to provide an efficient space usage.

Regarding claim 16, Meng discloses said first and second directions being opposite directions.

Regarding claim 18, Meng discloses said peripheral device is electrically connected to the system board only via said inward- facing port.

Regarding claim 19, Meng discloses a system board comprising a connector, the connector including: a first port (14) situated on the system board; and a second port (16), facing inward to an interior of the system board in order to accommodate a peripheral device that is electrically connected to the system board only via said second port. Meng does not disclose the first port being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that "changes may be made in detail, especially in the matters of shape, size and arrangement of parts within the principles of the invention" (col. 3 lines 3-5). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to form the first port situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first port.

Regarding claim 20, Meng discloses a system board comprising a connector (10), the connector including: a first port (14) situated on the system board; and a second port (16), facing inward to an interior of the system board; wherein said first and second ports face in respective first and second directions that are parallel to the system board. Meng does not disclose the first port being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that "changes may be made in detail, especially in the matters of shape, size and arrangement of parts within the principles of the invention" (col. 3 lines 3-5). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first port situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first port.

Regarding claim 21, Meng discloses a system board comprising a connector (10), the connector including: a first port (14) situated on the system board; and a second port (16), facing inward to an interior of the system board; and a mechanism (60), separate from said ports, whereby said connector is attached to the system board. Meng does not disclose the first port being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that "changes may be made in detail, especially in the matters of shape, size and

arrangement of parts within the principles of the invention" (col. 3 lines 3-5).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first port situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first port.

Regarding claim 22, Meng discloses a system board comprising a connector, the connector including: a first recess (14), for facilitating a mechanical and electrical connection of said connector to a first peripheral device, said first recess being situated on the system board; and a second recess (16), for facilitating a mechanical and electrical connection of said connector to a second peripheral device, said second recess facing inward to an interior of the system board. Meng does not disclose the first recess being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that "changes may be made in detail, especially in the matters of shape, size and arrangement of parts within the principles of the invention" (col. 3 lines 3-5). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first recess situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first recess.

#### **(10) Response to Argument**

In response to Appellant's argument (top of page 14) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be

established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been skill of a worker in the art at the time the invention was made that placing the connector near an edge of the motherboard would improve accessibility to at least one of the ports.

While Appellant argues that "these changes must be within the principle of the invention, which is to position two daughter boards parallel to the mother board, inside the computer, far enough from the mother board to not interfere with the components on the mother board", it is noted that there is nothing in the disclosure of Meng that restricts the connector's design to interior use only.

In response to Appellant's arguments that the proposal "to place [the] card edge assembly 10 of Meng '399 near an edge of the motherboard to improve accessibility to one or both of the card edge connectors 14 and 16" is "correct but irrelevant", it is noted that the fact that Appellant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In this case, placing the first port (of Meng) at an exterior edge of the system board and facing outward from the exterior

edge, not only provides greater accessibility to the first port, but also results in the first port facing outward and the second port facing inward.

In response to Appellant's arguments (regarding claim 3, in page 15) that using ports that are functionally identical "is contrary conventional wisdom, which uses different kinds of ports for components that are intended to be housed within a computer and components that are intended to be mounted outside the computer", it is first noted that Meng discloses the use of ports that are functionally identical. Second, any modification of the structure or use a known apparatus will likely be deviation of conventional structures or uses. Accordingly, the fact that a modification differs from conventional practice does not prove that a modification is unobvious, but merely that a modification is intended. To support the contention that a deviation from conventional practice makes an invention unobvious will preclude any obviousness-type rejection at all.

In response to Appellant's arguments (top of page 16) that "ports for accommodating interior vs. exterior components would be expected to be functionally different", it is noted that even if Appellant's arguments are accepted (which are not), a interior and an exterior port would be at most physically different, i.e. "more robust", but not necessarily functionally different.

In response to Appellant's arguments (regarding claim 4, in page 16) that "the conventional wisdom was to use USB ports for connecting peripheral devices to computers, not for connecting component within the same computer", it is noted that

Art Unit: 2833

conventional wisdom or practice does not preclude known devices from being use for a different purpose.

Furthermore, it is noted that the description of "USB" provided by the Appellant (in page 16) does not limit its use for external or internal devices.

In response to Appellant's arguments (in the last paragraph of page 16) that "[internal use] is not why the USB standard was developed", it is again noted that conventional practice does not bar new/different uses of known devices.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
Felix O. Figueroa

Conferees:

Paula A. Bradley  
SPE Art Unit 2833

  
P. AUSTIN BRADLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

Ricky L. Mack  
SPE Art Unit 2873

